

**THE PORT AUTHORITY  
OF NY & NJ**

ORIGINAL SIGNED BY JERROLD DINKELS  
ENGINEERING PROGRAM MANAGER  
WORLD TRADE  
ORIGINAL SIGNED BY JACK BUCHSBAUM  
CHIEF ELECTRICAL ENGINEER

1	2-2-01	AS BD	
No	Date	Revision	Approved

ENGINEERING DEPARTMENT

**WORLD  
TRADE  
CENTER**

**ELECTRICAL**  
Title

TENANT STAND-BY POWER SYSTEM  
SUBSTATIONS SP-41A2, SP-7B

**1 WTC 41ST FLOOR  
EQUIPMENT  
ACCESS PATH**

This drawing subject to conditions in contract.  
All inventions, ideas, designs and methods  
herein are reserved to Port Authority and  
may not be used without its written consent.

AVENOSO AVENOSO A.SENIOR  
Designed by Drawn by Checked by

Date DECEMBER 8, 2000

Contract  
Number WTC-945.083

Drawing  
Number **E4**

**NOTES**

- COORDINATE THIS DRAWING WITH CONTRACT DRAWING E10.
- PROVIDE PROTECTION TO THE ELEVATOR CARS INTERIOR AND FINISH.
- HOISTING OF EQUIPMENT ON ELEVATOR IS LIMITED TO 50% OF THE CAR'S RATING. LOADS EXCEEDING THIS LIMIT WILL REQUIRE THE ASSISTANCE OF 'ACE ELEVATOR' TO 'HANG' THE CAR DURING LOADING AND UNLOADING. ANY PIECE OF EQUIPMENT EXCEEDING 225% OF THE CAR'S RATING WILL ALSO REQUIRE THE CAR TO BE 'HUNG' BY 'ACE ELEVATOR'. THE CONTRACTOR SHALL HIRE 'ACE ELEVATOR' AS A SUB-CONTRACTOR TO PERFORM THIS FUNCTION AS PART OF THE CONTRACTOR'S SCOPE OF WORK. VERIFY WITH THE ENGINEER THE MAXIMUM ALLOWABLE CAPACITY OF THE SELECTED HOISTING ELEVATOR. THIS WORK WILL BE COMPENSATED FOR UNDER THE NET COST PROVISION OF THIS CONTRACT.
- THE CONTRACTOR SHALL MEET WITH THE ENGINEER TO SCHEDULE DATE(S) AND TIME ASSIGNMENTS TO SECURE USE OF THE ASSIGNED ELEVATORS FOR HOISTING SUBSTATION EQUIPMENT TO THE 7TH AND 41ST FLOORS. ELEVATOR ASSIGNED FOR HOISTING THE EQUIPMENT IN 1WTC PROVIDES CONTINUOUS SERVICE TO 'WINDOWS ON THE WORLD'. ALL WORK REQUIRING SERVICE INTERRUPTIONS TO 'WINDOWS ON THE WORLD' RESTAURANT SHALL BE SCHEDULED, AGREED TO, CLEARED AND APPROVED BY THE ENGINEER BEFORE START OF WORK.
- PROVIDE PROTECTION DURING CONSTRUCTION TO PREVENT DUST AND ODORS FROM ENTERING ADJACENT SPACES.
- PROVIDE FLOOR CRIBBING TO DISTRIBUTE HOISTING LOAD EVENLY.
- ALL FIRE ALARM AND COMMUNICATION CABLES AND CONDUITS IN THE PA1-4 OR INTERFERING WITH ACCESS OF EQUIPMENT IN THIS INSTALLATION SHALL BE RELOCATED TO AVOID HOIST AND RIGGING. IF INSUFFICIENT SLACK CABLE(S) PROHIBITS RELOCATION, THEN THE CABLE(S) SHALL BE IDENTIFIED AT BOTH ENDS, REMOVED AND REPLACED WITH IDENTICAL CABLE(S) OF SUFFICIENT LENGTH TO AVOID ADDITIONAL SPLICES. THE REPLACEMENT OF CABLES WILL BE COMPENSATED FOR UNDER THE NET COST PROVISION OF THIS CONTRACT.
- THE ACCESS PATH SHOWN FOR THE TRANSFORMERS WILL BE THE SAME FOR SWITCHGEAR, SWITCHBOARD AND OTHER HEAVY EQUIPMENT.

CONCRETE PAD TO BE  
REMOVED (TYPICAL).  
SEE STRUCTURAL  
DRAWINGS

TRANSF

TRANSF

TRANSF

TRANSF

TRANSF

PE#7

CE#6

**PART PLAN - 1WTC 41ST FLOOR  
EQUIPMENT ACCESS PATH**



0 4 8 12 16  
SCALE IN FEET